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SECURITY ASSISTANCE DEPENDENCE—
WIELDING AMERICAN POWER

by

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Chapter 1

Introduction

The United States of America wields unrivalled military power throughout the world in an effort to produce favorable national security objectives. One vehicle of this power brokering is the well-developed international security assistance program – oftentimes incorrectly referred to exclusively as foreign military sales. There is nothing simple about the security assistance program as it has developed today. It involves complex relationships between the United States Government (USG), defense industry (both foreign and domestic) and recipient nations. For the USG, there are many agencies influencing today's security assistance program to execute complex, integrated tasks directly impacting U.S. foreign policy. The U.S. Administration, U.S. Congress, Department of Defense (DoD) and Department of State (DoS) all view security assistance as big business. More than 10,500 DoD military and civilian employees, directly or indirectly, at home and abroad in over 120 countries, are involved in this complex, often intriguing program. Intriguing not only because of the scope and dollar value; but most importantly, due to the impact on national security. In 2002 alone, new worldwide U.S. foreign military sales were worth \$11.8 billion. The cumulative foreign military sales program is spread across more than 13,000 cases at an astounding \$221 billion.

This paper uses the long-standing U.S. security assistance program with the Republic of Turkey as a case study depicting how this valued NATO ally has come to depend almost

exclusively on U.S. security assistance. Analyzing this dependence will reveal some interesting inconsistencies regarding U.S. selective technology transfer policy and how advanced weapon system sales have led to host nation over-dependence on U.S. origin technology and processes. It will be an ambitious study to frame and will attempt to examine whether or not current U.S. export controls and national security considerations should prevent advanced military technology transfer to our allies. We will delve into defining the U.S. security assistance process and policy by taking an in-depth look at the major players and relations. This will lead to an essential discussion on in-place technology transfer safeguards to satisfy the U.S.'s greatest fear – compromise of classified material and methods. That is, losing the technological advantage that enables the U.S. and its closest allies to stay ahead of traditional adversarial states, and terror-sponsoring states and non-state entities. The discussion will be followed by critical analysis of security assistance as an instrument of military power. Finally, recommendations based on the author's observations and experience will be presented for consideration.

This critical analysis might not be enthusiastically accepted in some circles. That is personally acceptable as it will be thought provoking and may influence readers to consider how the USG creates security assistance dependence and applies selective, critical technology transfer as a “strong arm” of its foreign policy.

Chapter 2

Security Assistance Defined

No in-depth discussion of security assistance is complete without first establishing a baseline of current program structure to include defining some unique terminology. The Glossary of Selected Terms at the end of this thesis is also available to assist the reader define unfamiliar terms to security assistance. For discussion in this paper, definitive guidance for the U.S. security assistance program comes from the Arms Export Control Act (AECA), U.S. Code 2000, Title 22 – Foreign Relations and Intercourse; the International Traffic in Arms Regulations (ITAR), 22 Code of Federal Regulations, Parts 120-121 and 125; and the Foreign Assistance Act (FAA) of 1961, as amended. These three legislative documents are expansive, founded solidly on the wealth of our nation’s experience in past international security assistance and cooperation. They form the authoritative basis of any engagement or cooperation plan and provide guidance essential to formulating foreign policy. The AECA, ITAR and FAA are frequently cited during collaboration with foreign nations in an attempt to convey how U.S. security assistance is restrictive in nature with little room for negotiation. A working knowledge of all three is necessary for discussions involving roles, responsibilities and relationships between the U.S. and foreign governments, and U.S. and foreign industry.

These documents refer to arms transfer and technology. An appreciation of both enables one to focus on each in the context of security assistance and establishes a common frame of

reference. “Arms transfer refers to the sale or transfer of defense articles, defense services or technical data to a foreign government or foreign company under contract to a foreign government. Under one of two formal mechanisms: (1) government-to-government transfers (Foreign Military Sales or FMS), and (2) transfers by U.S. industry directly to foreign governments or foreign companies under contract to foreign governments (Direct Commercial Sales or DCS). Technology encompasses the body of information, know-how, methods and materials used to apply science to industrial or commercial objectives.”¹ Arms transfers frequently involve technology transfer. Technology transfer means the passing of this knowledge from one party (USG or U.S. industry) to another party (foreign government or foreign company). The technology for transfer can be either classified or unclassified. The majority of arms transfer and technology discussions in this paper will emphasize classified, often critical, military hardware, software, capabilities and services.

An understanding of the language of security assistance, as well as an appreciation of the USG roles and responsibilities, are essential not only to U.S. players, both government and industry, but also to the foreign governments and industry. It is essential to understand the scope of the entire program and note the number of inter-agency elements providing a system of checks and balances. Overall responsibility falls to the Secretary of State for continuous supervision and direction of arms transfer integration into U.S. foreign policy. Particularly, the approval authority on security assistance license applications required by U.S. law. “In order to control exports of security assistance materials and services, the ITAR requires authorization through a licensing process.”² To highlight the magnitude of licensing, during the period of June 2001 to May 2002, 14,365 U.S. defense [industry] “staffed” munitions license applications were submitted.³ “Staffed” cases refer to those cases that are coordinated with other USG offices

before final disposition (e.g. offices in the Department of Defense, Department of State, Congressional notifications, etc.).

In close coordination with the DoS, “The Secretary of Defense is responsible primarily for establishing military requirements and implementing programs effecting the transfer of defense articles and services. The Congress authorizes and appropriates the funds for the U.S. Government financed portions of security assistance. Congress also has an oversight role with respect to the sale of defense articles and services to foreign countries and international organizations.”⁴

The coordination of security assistance supporting U.S. foreign policy and national security objectives is less complex than it may look on the chart depicted in the Security Assistance Management Manual (SAMM) (Attachment 1).⁵ This coordination matrix has evolved based on the increase in size and importance of security assistance to U.S. vital national interests. The Secretary of Defense has delegated the principle representative and spokesman for security assistance to the Under Secretary of Defense for Policy (USDP). USDP has the daunting responsibility for policy relating to NATO in general, individual members, as well as other alliance and security partners. USDP is tasked to provide security management to both U.S. and allied technology. The Assistant Secretaries under USDP provide regional focus for security assistance policy. These Assistant Secretaries are supposed to be the focal points in DoD, in collaboration with DoS counterparts, in leading the national security apparatus toward selective technology transfer decisions. USDP works closely with the Director of the Defense Security Cooperation Agency (DSCA).

DSCA is the principal office by which the Secretary of Defense carries out his responsibilities for security assistance. DSCA provides the manpower and resource support for

all DoD security assistance. “It serves as the DoD focal point and clearinghouse for tracking arms transfers, budgetary, legislative and other security assistance matters through the analysis, coordination, decision, and implementation process.”⁶ The SAMM emphasizes DSCA keeping all concerned elements of DoD informed about ongoing programs. Unwritten is DSCA’s integral coordination with DoS counterparts, especially when Congressional notification is required by law, and most especially when Congressional in-session windows narrow effective legislation opportunities. The agency is also responsible for sales negotiations with foreign nations and provides liaison with, and the provisions of assistance to, U.S. industry in the export of arms and services. “All authorities conferred on the Secretary of Defense by the FAA and the AECA, and all authorities under those acts delegated by the President to the Secretary of Defense, are redelegated to the Director, DSCA.”⁷

While DSCA provides inter-agency coordination, the Military Service Departments play an equally large roll in affecting the security assistance process; specifically the offices of the Secretary of the Air Force for International Affairs, Navy International Program Office and the U.S. Army Security Assistance Command. These three organizations, and auxiliary service-specific security assistance training and logistics management organizations, are the executive implementing agencies responsible for the daily management controlling the entire security program. They are responsible for handling all service-specific aspects of security assistance, including contract line item management (costs, procurement and schedules). Service-specific systems and capabilities expertise are retained by the Services as delegated by the Secretary of Defense providing the subject matter expertise to coordinate and negotiate with the interested foreign party.

Closely aligned with the Service responsibilities are those of the Joint Chiefs of Staff (JCS) and the Regional Combatant Commands. The JCS provides consultation on proposed transfer of major defense equipment and technology, and issues regarding national disclosure policy. The Regional Combatant Commands have significant security assistance, force protection and armaments cooperation responsibilities. The Combatant Commanders coordinate their theater cooperation plans with U.S. country teams, and provide military advice as required aside from in-country security assistance organizations (SAOs).

It is predominantly the SAOs that integrate all facets of the DoD elements. SAOs are the experts that interface with the host nation Military Services and Government Ministries regarding FMS and DCS concerns and programs; past, present and future. The SAO in Turkey is the U.S. Office of Defense Cooperation (ODC). It is the second largest in the world indicative of Turkey's large U.S.-origin arms inventory (80%). The size of the SAO is also a clear indicator of the strategic importance of the host nation to U.S. regional vital interests. The following are some of the security assistance specific tasks of an SAO:⁸

1. Equipment and services case management (121 active Air Force cases worth \$1.58B in Turkey alone, sixth in the world behind Saudi Arabia, South Korea, Israel, Taiwan and Egypt)⁹
2. Training management
3. Program monitoring
4. Evaluation and planning of the host nation's military capabilities and requirements
5. Administrative support
6. Promoting armaments cooperation
7. Liaison functions exclusive of advisory and training assistance¹⁰

All SAO tasks are coordinated with the Chief of the U.S. Diplomatic Mission and his or her embassy staff to ensure execution with a unified intent and commitment. More recently, SAOs find themselves taking the initiative to go directly to Stateside DoS offices to mitigate, collaborate and accelerate program case management. This is especially true when high

visibility, high dollar, advanced capability systems require expedient management and coordination in the best interests of U.S. security objectives.

The in-country SAO role is also defined by the level of security assistance independence demonstrated by the host nation. For the purposes of this discussion, what distinguishes a Tier I developed nation from a Tier II (Turkey) is that nation's indigenous capability to perform U.S. security assistance collaboration autonomously. That is to say, without significant reliance on in-country SAOs to provide significant support that may be considered a substitute for a host nation's international procurement agency chartered with advanced weapon system acquisition. The SAMM emphasizes that SAOs should "enable the foreign government to acquire information needed to make decisions concerning the acquisition, use, and required training involved in obtaining defense articles and services from the United States through security assistance programs (keeping in mind that the host countries are to be encouraged to establish and depend, to the extent possible, upon their own procurement missions in the United States [and at home]."¹¹ The overall responsibility for U.S. foreign policy and related programs within any foreign nation resides with the U.S. Ambassador in his or her role as the Chief of the U.S. Diplomatic Mission. As such, the U.S. Ambassador and the Chief, SAO, in the subject country must undertake significant efforts to ensure host nations move toward greater self-reliance and independence in today's sophisticated international security assistance-cooperation arena. The Ambassador's direct connection to America's President provide very rapid visibility when a crisis warrants attention, and routinely provides a vehicle to update the Administration on significant security issues. Frequently, issues include the strength, readiness and interoperability of our allies and friends; which is a direct indicator of the health of our current security assistance programs and guides future engagement and cooperation.

While the Chief of Mission has direct access to the President and his Administration at home, the SAOs have unprecedented access to the highest levels of both host nation Military Services and General Staff senior leadership. During the initial stages of Operation Enduring Freedom, ODC Turkey Military Service Directors had direct access to host nation four-star Service Chiefs. This relationship was well-developed through the day-to-day interactive meetings by ODC personnel at Turkey's Military Service Headquarters and by frequent, unencumbered country-wide base visits. This is a unique relationship enjoyed almost exclusively by the SAO over most other U.S. agencies in country.

The SAO obtains information needed to evaluate a host nation's military ability to employ and maintain weapon systems and assists in developing foreign government arms transfer proposals. For example, ODC Turkey was consulted by the host nation frequently on the administrative accuracy of such documents as Letters of Request and translating the finer aspects of Letters of Offer and Acceptance.¹² These are documents requiring the highest degree of accuracy to avoid misinterpretation at any point of the complex coordination – review – acceptance process. Averting confusion early in program development paid back big dividends in saving valuable time, as well as dollars. Monitoring progress of security assistance initiatives – either foreign military sales, direct commercial sales or a combination of both – and initiating appropriate remedial action or advising the appropriate DoD or DoS component are frequently required of the more advanced U.S. SAOs. Any time saved that allows for fielding systems earlier is always considered a small victory for the SAO in that it fosters host nation confidence and trust in SAO performance. SAO generated cost-saving initiatives are of course very well received. SAOs also provide close liaison with in-country U.S. defense industry representatives. Solid, information-sharing professional relationships with U.S. industry is a way of the future.

Both industry and government realize that cooperative efforts, within legal limits, satisfy both party's interests.

U.S. industry is keenly aware of the need to adjust the current arms transfer system involving critical technologies. Clay Williams, past president of Litton ATD emphasizes in the *Journal of Electronic Defense* that,

“A change in the U.S. export licensing process is certainly necessary to keep U.S. industry competitive with international firms. The change however, must reflect market and competitive conditions and foreign availability as well as security concerns. It is in our national security and foreign policy interests for the U.S. defense industry to be healthy and successful internationally. The dynamics of the international marketplace will continue to affect U.S. competitiveness. As change occurs, U.S. export policy [and process] needs to adjust accordingly and in a timely manner. The strongest for success in the international marketplace is a united U.S. Government/industry team.”¹³

In an effort to stem the tide of what was perceived as an arms transfer bureaucracy fractured by lack of communication and oftentimes language barriers, the DSCA initiated a new management concept as part of an overall security assistance reinvention – enhancing partnership through Team International. DSCA recognizes that “export sales and transfers are complex involving three primary stakeholders: U.S. government, allied and friendly governments, and U.S. defense commercial contractors. Each stakeholder operates under a unique set of constraints and objectives.”¹⁴ DSCA recognizes the differences and is attempting to accommodate them via improved planning, information sharing and closer relationships among all stakeholders. DSCA's emphasis is to instill the concept of Team International as a formal business practice throughout the security assistance community.

“Team International is actually an Integrated Process Team (IPT) that combines the efforts, knowledge and interests of the various stakeholders. Team participants may include: (but are not limited to representatives from) the Military Department policy and/or executing activities; the Program Manager and Program Office; the Military Department country director; the relevant U.S. Unified Command; Department of Defense contracting community; Departments of

Commerce and State; U.S. industry; the country team; the foreign customer; and DSCA.”¹⁵

The success of Team International is dependent upon all relevant players being brought together at the earliest possible point and remaining cohesive through program lifecycle. “This creates a forum [the crux of the concept] for communication among **all** [emphasis added] participants to identify and to resolve issues regarding accountability, legal/security risks, technology transfer, cost reduction, customer satisfaction, and timely responsiveness to the foreign customer.”¹⁶

Team International is envisioned to address the more difficult aspects of security assistance. Specifically, those aspects that could possibly be deterrents and drive foreign customers from considering the U.S. as the most suitable source to meet their defense needs. Specifically, this means identifying as early as possible and coordinating releasability and licensing issues. Significant with the current trend toward direct commercial sales or hybrid FMS/DCS. DSCA envisions Team International as best suited for programs that:¹⁷

1. Introduce a weapon system into a customer’s inventory.
2. Integrate a weapon system on a nonstandard or non-U.S. platform.
3. Involve more than one military department.

After studying the *Guidelines for Implementation of Team International*, it becomes evident that under the current atmosphere permeating the international defense community, a few deficit areas could fare well if formalized around the IPT concept from the project concept. Team International can assist the customer to establish effective and coherent acquisition strategies and facilitate resolution of regulatory and policy issues. These issues pertain to releasability, disclosure, technology transfer, licensing, delivery schedules and contracting

techniques that cause great consternation recently among parties participating in traditional security assistance relationships.

Instituting a Team International IPT can come from a request by any of the stakeholders. Leading the team is the responsibility of the appropriate military Service implementing agency. Team International represents the perfect opportunity for Turkey to demonstrate its ability to step up from its current Tier II status and graduate to the highest level of arms transfer competence. Demonstrating protection assurances greatly alleviates the USG's apprehension of technology compromise to rogue states or elements. Specific steps for technology transfer compliance and safeguards are spelled out in the next section.

Notes

¹ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Annex B, Glossary of Selected Terms.

² 22 Code of Federal Regulations, 22 *U.S. Code* 2751; *International Traffic in Arms Regulation*, 2002, Subchapter M-ITAR, Part 120.1(c) General Authorities and Eligibility.

³ U.S. Department of State, Bureau of Political-Military Affairs, Office of Defense Trade Controls, *Defense Trade Controls-Current Processing Times*, 29 August 2002, available at <http://www.pmdtc.org/processtime.htm>.

⁴ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Chapter 3, Section 30001-General.

⁵ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Chapter 3, Table 300-1-Decision Channels for Security Assistance.

⁶ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Chapter 3, Section 30002-The Department of Defense.

⁷ Ibid.

⁸ Ibid.

⁹ Data provided by the U.S. Air Force Security Assistance Center, Wright-Patterson Air Force Base, Ohio. Current as of 1 November 2002.

¹⁰ Not true anymore. Turkey serves as a good example where liaison has migrated into full-scale defense cooperation of operational activities; particularly, Operations NORTHERN WATCH and ENDURING FREEDOM. The U.S. Office of Defense Cooperation in Turkey has assumed tasks atypical of traditional SAOs. An operations cell was instituted post-Operation Desert Shield to facilitate the growing bi-lateral coordination required to successfully accomplish enforcement of the Iraqi Northern no-fly zone from Turkish Air Bases. Bases now also supporting Operation ENDURING FREEDOM.

¹¹ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Chapter 3, Table 300-4-SAO Security Assistance Program Management and Oversight Functions.

¹² Letter of Offer and Acceptance (LOA) is the U.S. document by which the USG offers to sell to a foreign government or international organization defense articles and defense services pursuant to the Arms Export Control Act, as amended. The LOA lists the items and/or services, estimated costs, the terms and conditions of sale, and provides for the government's signature to indicate acceptance. Letter of Request (LOR) is a written message or letter request from eligible FMS participants for the purchase of defense articles or services.

¹³ Steve Crandall, "Technology Transfer of EW (Electronic Warfare) Systems," *The Journal of Electronic Defense* April 1994, 49.

¹⁴ Defense Security Cooperation Agency Memorandum, *Enhancing Partnership Through TEAM INTERNATIONAL*, Washington, D.C., 24 July 2001.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

Chapter 3

Security Assistance and Technology Transfer Safeguards

The transfer of advanced technologies is of great concern not only to the USG, but to U.S. regional allies as well. Manipulating the regional balance of military power is a chess game of diplomacy. As important, and possibly of greater importance, is the chance that the advanced technology will not be safeguarded. Potential compromise due to differences of foreign military and defense industry security practices is always possible. This risk can only be adjudicated with well-defined safeguards and transfer plans updated periodically for accuracy and compliance. Without such controls there would be no guarantee that proliferation to external players would not occur.

“It is the USG law and policy to transfer defense articles and services when such transfers will strengthen the security of the United States; help allies and friends deter or defend themselves against aggression while promoting interoperability with U.S. forces; and ensure that U.S. military forces continue to enjoy technological advantages over potential adversaries.”¹⁸

Software and source code transfer have become the focal point of critical military technology whose sophisticated development or application could give a significant military advantage to any country or non-nation entity that may prove detrimental to the security of the U.S. and its military forces. Software development and manipulation signify a technology capability required in the employment of today’s most advanced weapons systems, especially

weapons delivery, and command and control platforms. Safeguards are in-place to prevent a product or technology from analysis or compromise that could reveal U.S. system characteristics and hence contribute to the development of countermeasures defeating the U.S. operational advantage. Safeguards begin with complete technology transfer plans required from a foreign customer and U.S. contractor in the pursuit of an FMS or DCS program.

Technical Assistance Agreements (TAAs) are part of transfer plans and are the most important documents developed early in any arms transfer program. TAAs are contracts that allow for the sharing of specific performance of defense services or the disclosure of technical data. They are the first line of safeguard to prevent the loss of critical technologies. Much time is wasted in negotiations when any party is not familiar with TAA requirements for classified technology transfers. Lack of mutual understanding of common, accepted terminology is all too often a downfall in TAA discussions between customer and prime contractor. Foreign user operational requirements and industry engineering specifications are often the basis of these often complex, legal documents. Unfortunately, many foreign customers are not familiar with the nuances of TAAs and oftentimes wind up at the mercy of industry experts who are more knowledgeable and current with USG policies and procedures.

Guidelines for international transfers of technology, goods and services come from policy delineated in Department of Defense Directive 2040.2, *International Transfers of Technology, Goods, Services and Munitions*. DoDD 2040.2 recognizes the special status of our allies and friends thereby bestowing favorable consideration to transfer services and capabilities that are intended to achieve specific U.S. national security objectives. The following captures the intent of this directive and must be carefully considered prior to and during TAA construction:

1. Treat defense related technology as a valuable, limited national security resource, to be husbanded and invested prudently in pursuit of national security objectives.

2. Restrict the export of technology, goods, services and munitions which could make a contribution to the military potential of any other country or combination of countries which could prove detrimental to U.S. national security interests.
3. Manage transfers of technology, goods, services and munitions consistent with U.S. foreign policy and national security interests.
4. Limit the transfer to any country or international organization of advanced design and manufacturing know-how regarding technology, goods, services and munitions subject to control under the AECA to those transfers which support specific national security objectives.
5. Support the National Disclosure Policy objectives in those cases where a proposed transfer involves the release of classified military information [or material].¹⁹

Again, as an example, Turkey's longstanding alliance with the U.S. shows its national resolve to continue favorable relations not only as a fellow NATO member, but also bilaterally as attested by the continued support from Turkey for what is going to be the eleventh year of Operation Northern Watch flown from Turkish soil. The continued use of Incirlik Air Base by U.S. forward deployed combat forces dates back to 1954. That's forty-eight years of continuous commitment to our unique alliance strongly surviving through 27 Turkish civilian governments and eight U.S. presidential administrations.

The Department of Defense, by Presidential authority, is the executive agent for the National Industrial Security Program Operating Manual (NISPOM), which contains regulations controlling the transfer of classified technologies. "These regulations include policies and procedures governing control of classified information in international programs and procurements. NISPOM spells out the U.S. National Disclosure Policy (NDP) for the U.S. disclosure of classified information to foreign nations related to defense articles and services under ITAR."²⁰ It is the intent and policy of the USG to avoid giving the false indication of its willingness to transfer classified military material, technology or information to a potential foreign nation or organization. Although much military material is unclassified, it is possible that the operation and maintenance of that equipment requires classified information. Therefore,

the disclosure decision must be made based on the classification level of all information that will be required for release if the system were to be acquired. Here lies an important point. If the proposed foreign recipient is not authorized to receive the highest level of classified information required, no information, not even unclassified, may be released or discussed until the required authority is obtained. Industry representatives must be aware of this safeguard during their application for arms export licenses and TAA development as extended delays awaiting disclosure release are often experienced when not addressed up front with the DoD and DoS.

Currently, the entire U.S. security assistance program is under its most intense criticism. Turkey, as well as other nations, has requested release of software source codes to upgrade capabilities on sophisticated, U.S. origin systems (F-16 aircraft and future AEW&C aircraft). Numerous requests have led to little progress in securing policy changes regarding technology transfer. Formal responses from the various USG implementing agencies indicate that these requests are under consideration pending extensive review. On April 8, 1997, the Office of the Secretary of Defense disseminated *Guidelines on International Transfers*, specifically software documentation. This guide leads the foreign purchaser and U.S. industry to believe that if one abides by these guidelines, favorable consideration would be given for software (including source codes) transfer. The following is a paraphrase of the published guidelines and accompanying steps that Turkey, Lockheed Martin (then General Dynamics), and the U.S. Government took to ensure computer software documentation and source code transfer were correctly identified for DoD-DoS consideration in conjunction with TAA applications of the mid-1980s F-16 aircraft co-production. The decision to bolster NATO's southern flank members with F-16s aircraft was a classic Cold War decision by the U.S., especially, the decision to accelerate Turkey's aviation industry' co-production of the world's second largest F-16 fleet.

The \$4.41 billion General Dynamics contract, a legacy of the last days of military rule in 1983, has involved considerable technology transfer and eventually enabled Turkey to supply the U.S. Air Force with F-16 fuselage and wing sets produced in Ankara. During contract negotiations, Turkey and General Dynamics proceeded under the guise that, “Favorable consideration would be given to the transfer of software documentation in support of end-items when all of the following have been appropriately addressed:”²¹

1. The recipient has purchased or committed to purchase the associated end-item in appropriate quantities relative to the recipient’s inventory (again, significant with respect to Turkey’s 223, three Block version, F-16 fleet).
2. The recipient agrees to establish an appropriate level of indigenous software support for the end-item (Turkey’s Software Manufacturing Facility became operational in November 2002).
3. The recipient agrees to use the provided software documentation only for operation and support of the associated end-item.²²
4. The recipient acknowledges that system performance or warranties (when applicable) may be invalidated if changes are made to the software (same argument as 3).
5. The risk of compromising critical DoD military capabilities, vulnerabilities, or intelligence data will not exceed the risk associated with end-item transfer, or any additional risk is offset by the benefit to the U.S. from the transfer of the software documentation.²³

The updated software (critical to modernizing and enhancing NATO interoperability) is overdue for transfer. Turkey has demonstrated compliance in all program phases. In fact, Turkey has become so competent with technology assimilation and training acquired through the F-16 program that it can rightfully be singled out as a regional leader of advanced capability. The Tusas Aerospace Industries (Turkey’s largest aviation company) and the Turkish Air Forces Command possess all the various aspects of training, maintenance and logistics support that would quickly be recognized in the U.S., or for that matter by any Tier I nation, as an F-16 Center of Excellence. It has already begun F-16 pilot and maintenance training for the United Arab Emirates and has applied through the U.S. Mission in Ankara to begin aviation training programs in a variety of aircraft to include F-16 conversion for Singapore and Pakistan.

There are a number of steps that will assist attaining favorable consideration for software documentation transfer, including source codes. A foreign nation-U.S. industry team must demonstrate knowledge of USG law regarding technology transfer by abiding by the following:

1. The existence of a government-to-government agreement related to the specific program.²⁴
2. In the development of future government-to-government agreements (TAAs), all of the guidelines in 1-5 above have been taken into account.
3. Recipient and U.S. responsibilities (e.g. support, maintenance, upgrades and repair) are explicitly addressed as part of the TAAs in language mutually understood and accepted by all negotiating parties.

Favorable consideration will be given to the transfer of software documentation in support of production or development programs (e.g. technical and manufacturing assistance agreements) not governed by a government-to-government agreement when all of the above have been taken into account. Furthermore, critical DoD military capabilities, vulnerabilities, or intelligence data will not be compromised, or the risk of compromise is offset by the benefit to the U.S. from the transfer. To emphasize, the risk of arms and technology transfer exploitation and proliferation is out-weighed by the benefit to the U.S. as Turkey will continue to be an anchor for democratic ideals in a regional sea of anarchy and uncertainty. This is an aspect that must be considered in future U.S. regional security strategy.

Today, as coalition commitment supporting Operation Enduring Freedom and the global war on terrorism is tested by time and resources, Turkey has proved without a doubt its resolve to stand shoulder-to-shoulder with the U.S. for the duration. This commitment, demonstrating national resolve, must not go unacknowledged by the U.S. Administration or Congress. Our valuable NATO ally is at a significant point in its industrial maturation, and is giving high priority to expanding technology in its national strategy. Potential exists to stand-alone in the

region. Turkey's industrial base is capable of sustaining Tier I level production if allotted the access to technology that is selectively given to other nations.

The U.S. has used security assistance to help and influence its allies and friends increase military capabilities for nearly one hundred years. The U.S.'s own defense industrial capability was called upon during World War I to outfit our allies' depleted war material reserves. From this point forward, with the exception of a hiatus during the inter-war years, security assistance became a mantra of U.S. foreign policy. Diplomacy backed by force has been a large factor in U.S. grand strategy of the 20th Century and continues to perpetuate in this century. Security assistance, as a critical tool of diplomacy, often makes the use of force unnecessary. This is not to say diplomacy always needs the threat of force to be effective. On the contrary, most of the time force is not needed. Yet, the perception that an ally or friend has the military capability and readiness to back up strategic interests is exactly where security assistance becomes so important. From the U.S. strategic position this perception of available force successfully enables states to pursue democratic ways without external impediment. What is important to remember is the threat of force cannot be credible if capabilities are outdated – technology provides the deterrent advantage.

Turkey resides in an unfriendly neighborhood. Three of the world's terrorist states, identified by the U.S. Department of State, are its neighbors. Turkey's military posture and willingness to use force to counter this threat to its national sovereignty is a testament to regional stability and pursuit of democratic ideals. The U.S. can ill afford to stand on inflexible processes when addressing Turkey's security assistance needs that ultimately align with U.S. security interests. Consideration should be given to help move Turkey into Tier I status. This can only be done by re-evaluating restrictive technology transfer policies based on outdated, unrealistic

risk assessments. Safeguards are in-place. These are the same safeguards that secure our sophisticated weapon systems and technologies stationed at Incirlik Air Base and have existed at numerous locations throughout Turkey for the last 48 years. This assurance of security is a strong indicator of Turkey's political-military commitment to secure dependable U.S. military power that ultimately increases its own national prestige.

Notes

¹⁸ R. Noel Longuemare and Jan M. Lodal "DoD Guidelines for International Transfers of Software Documentation (including Source Code)," *Defense Institute of Security Assistance Management Journal*, Fall 1997, 12-15.

¹⁹ DoDD 2040.2, *International Transfers of Technology, Goods, Services and Munitions*, January 17, 1984.

²⁰ DoD 5220.22-M, *The National Industrial Security Program Operating Manual*, 1995, 10-1-1, available at <http://www.dtic.mil/whs/directives/corres/html/522022m.htm>.

²¹ Longuemare, 13.

²² This stipulation is of great concern to the Turkish Air Force as they are fully capable of indigenously integrating software source codes once approved for release by the USG. The USG is insisting that the risk is too great since Turkey would possess the capability to manipulate the source codes thus possibly affecting commonality during coalition warfare (Kosovo dilemma).

²³ This allows for subject conjecture by the USG based upon current international environment, national security strategy, and foreign military policy. Turkey's standing with the U.S. Congress will undoubtedly affect the ultimate decision for transfer as computer source code transfers are on the Military Critical Technologies List and must be approved by Congress per U.S. law.

²⁴ Turkey has anticipated this requirement and entered into a Cooperative Space Memorandum of Understanding with the U.S. that will act as the cornerstone agreement for all future Technical Assistance Agreements for specific Space technology transfer applications.

Chapter 4

Political Military Dimensions

Security Assistance as an Instrument of Military Power

*Power entails the military, economic, and technological capabilities of states, while prestige consists of the perception of other states with respect to a state's capabilities and its ability and willingness to express its power.*²⁵

Kenneth Waltz proposes that it is possible to rank order the capabilities of states by quantifying “how they score on all of the following items: size of population and territory, resource endowment, economic capability, military strength, political stability and competence.”²⁶ Arguably, economic capability and military strength are closely dependent upon a credible technological capability. The state’s progress stagnates without the opportunity to expand its industrial base with maturing technological aptitude and state-of-the-art arms transfers that promote foreign industrial growth. Regional and global rankings are affected. States, including the U.S., view indigenous technology research, development and production as critical links in the growth toward self-reliance and diminished external dependency. Also, very important in the power equation is the timing of technology transfer. Timing often controlled by political decision makers at a pay grade well above those of day-to-day security assistance program management.

Managers must plan to transfer at a specific point in an acquisition program or at a specific, well-defined, time to ensure capability is controlled and not then marketed outside the stringent guidelines of U.S. policy. Selective transfer protects both USG capabilities and allows U.S. contractors to maintain an industrial edge in future business endeavors. Aspiring foreign purchasers would like to convert technologies obtained through security assistance purchases

into their own ambitious endeavors to establish a more advanced, competitive defense industry. In reality, very few nations are able to develop and maintain today's sophisticated level of defense research and manufacture (Tier I). With respect to aviation, it becomes not so much an issue of airframe, power plant and associated onboard systems development and production as it does the advancement of technology required in development and modification of software configuration changes thereby increasing system capability. In today's technology explosion, obsolescence comes quickly to other than Tier I nations without outside support providing access to advanced technology via security assistance. A well-grounded security assistance program is essential to the U.S.-Turkish alliance.

Turkey is an increasingly important U.S. strategic partner. It has been the anchor of NATO's southeastern flank for more than 50 years with the second largest military force in the alliance. "Situated at the crossroads of Europe, the Middle East, and Asia, Turkey plays a key role as the example of stability in a very volatile region."²⁷ With a predominantly Muslim population (99%) of nearly 67 million, a modern, democratic state (Republican Parliamentary Democracy), and huge potential for economic growth, Turkey serves as a paradox of development compared to its neighbors in the East.²⁸ Turkey's persistent candidacy for membership in the European Union is helping define its rightful place among the community of developed nations. This pursuit is a strategic priority for further U.S.-Turkish relations. Turkey's commitment to democratic reform and human rights was evidenced in October 2001 when the Turkish Parliament passed a package of 34 constitutional amendments providing increased protection for freedom of expression.²⁹ In August 2002, the parliament voted to overcome long-standing institutionalism and eradicate the nation's death penalty; a major point of contention for European Union membership.

Turkey not only remains one of a handful of states decisively affecting U.S. interests in multiple areas, but also has gained immense additional importance since September 11, 2001. Together, the U.S. and Turkey have contributed decisively to global security. Turkey has been an important player, providing full support to U.S. and coalition efforts in the global war on terrorism. Turkey has also offered assistance in ongoing terrorist investigations, and is currently in command of the International Security Assistance Forces in Afghanistan. In January 2002, President Bush and Turkish Prime Minister Bulent Ecevit agreed to begin upgrading the U.S.–Turkish economic partnership by raising economic ties to the level of our strategic relations in the political and military arenas. With \$6 billion in balanced two-way trade, Turkey offers tremendous potential for U.S. exports.³⁰ U.S. export promotion is focused on energy, agriculture and military sales. The U.S. Mission to Turkey’s goal over the next three years is to expand overall exports dramatically and finalize \$5 billion in arms transfers, including attack helicopters and Airborne Early Warning and Control aircraft.³¹ The Mission forecasts economic and budget recovery allowing for sufficient funding that will lead to the acquisition of these critical military capabilities. These capabilities will integrate well with U.S. assets already deployed in-country and could eventually relieve some of the already strained U.S. regional presence. These initiatives are important indicators of the democratic direction Turkey has chosen and are important for U.S. legislators to recognize as petitions for arms and technology transfers are considered in the U.S. Congress.

One would think that the dramatic events of 11 September 2001 would make us reconsider how we view common defense needs. Invoking NATO’s mutual defense clause Article V, should open opportunities to adjust export controls to our strong NATO ally. Turkey should be viewed as an opportunity to carry forth a clear message. “The message seems obvious that our

shared security interests demand export control regimes [critical technology transfer] that will facilitate collaborative defense modernization and transnational defense industrial cooperation, so as to maximize military interoperability among allies in the future.”³²

Advancing interoperability enables nations to conduct safer, more reliable coalition operations such as those we have promulgated in Afghanistan. Interoperability is most commonly acquired through security assistance exportation and international industrial coproduction. The sophistication of the interoperability proves to be the area under most technology transfer criticism. There are still too many restrictions to technology transfer impeding interoperability. The Operation Allied Force experience of 1999 in Serbia has shown that we can ill afford to enter into future symmetric or asymmetric warfare without full interoperability with coalition partners. In Operation Allied Force, interoperable command and control of NATO air assets was degraded due to differences in system software shared by the U.S. and other coalition forces. This situation has not been rectified even though considered the single greatest impediment to future coalition operations. Lessons learned from past operations must be acted upon, not just touted and glossed over.

If history is an indicator, Turkey will be ever present in American pursuit of national security interests. As President George Bush emphasizes in the new 2002 U.S. National Security Strategy, “...NATO must develop new structures and capabilities to carry out [the Article V self-defense] mission under new circumstances.”³³ As the Administration expects NATO to change, so too must the U.S. change to accommodate the rapidly changing global security environment and inherent need for U.S. arms transfer policy modification. Past policies have fostered selective security assistance in the U.S.’ best interests in a symmetric world. The war on terrorism operates in an environment full of asymmetry. This unconventional warfare demands

that the U.S. makes the most of adjusting export control policies to counter the asymmetry while continuing to provide safeguards against the diversion of military arms and technologies to terrorist groups or rogue states.

To say that security assistance and the transfer of technology should be nothing more than an extension of foreign policy is too short sighted – even blind. The USG’s preeminence in the realm of foreign policy and global influence makes it imperative that our allies – and none are stronger than Turkey – are allotted due consideration to favorable technology export policies. Turkey’s long, reliable ability to protect state-of-the-art military systems acquired from the U.S. is a testament to continued improvements in this area. We must ensure our allies’ military forces join us with superior military capabilities that are interoperable at every level.

Acquiring interoperable systems takes a well-developed acquisition plan constructed by all parties as well as a solid understanding of strategic cooperation. The technology transfer plan must be collaborative. For without interaction, critical technology transfer issues will not be adequately addressed. Many safeguards could get neglected and purchaser capability requirements could become diluted. Communication barriers would keep critical information from reaching those in position to make important decisions. A habit pattern of mutual trust and effort must be implicit to ensure any plan is successfully reevaluated periodically or as situations dictate. All the better if an ally has a flexible national security strategy that emphasizes continued U.S. security cooperation and that guidance filters to all parties in arms transfer collaboration. The country team can address this strategy as it applies to our own U.S. security strategy and project future host nation military requirements. This will provide visibility as to what unique aspects of those capability acquisitions need expeditious staffing as the arms transfer process is complex and filled with important, regimented safeguards. As a part of the

decision matrix for arms/technology transfer, many of the U.S. agencies described in section two will look closely at how regional military power is affected and balanced by transfer.

The case of security assistance as an instrument of military power is unquestionable. Turkey's unique geo-political position to U.S. global interests remains stronger than ever. The very real possibility that Turkey will soon act as the "springboard" of the next round of military operations against global terrorism strengthens the argument that Turkey has earned special consideration for its continued, unwavering support of U.S. regional security interests closely aligned with its own. As threats to our coalition become increasingly sophisticated, the technical challenges of interoperability multiply and become increasingly difficult to solve. The Afghanistan solution will not satisfy the next generation Iraqi conflict. As Turkey has committed to fight global terrorism, the question becomes will she be allowed to stand shoulder-to-shoulder with U.S. as equals in the fight with comparable technological capabilities (removing interoperability concerns)? Or, will they be remembered as warriors who answered the call to battle, but whose swords were dulled by their closest ally?

Notes

²⁵ Robert Gilpin, "War and Change in World Politics", (New York: Cambridge University Press 1981), 33.

²⁶ Kenneth N. Waltz, "Theory of International Politics," (McGraw-Hill, Inc., New York), 191-2.

²⁷ Kay, Sean and Judith Yaphne. "Turkey's International Affairs." *National Defense University Strategic Forum*, July 1997, available from <http://www.ndu.edu/inss/strforum/forum122.html>.

²⁸ "Turkey Country Review," *Countrywatch*, n.p., on-line, Internet, 11 August 2002, available from http://www.countrywatch.com/cw_country.asp?vCOUNTRY=176.

²⁹ U.S. Mission to Turkey, *Mission Performance Plan FY 2004*, 3.

³⁰ "Turkey Economic Conditions," *Countrywatch*, n.p., on-line, Internet, 11 August 2002, available from http://www.countrywatch.com/cw_country.asp?vCOUNTRY=176.

³¹ U.S. Mission to Turkey, 5.

³² Lincoln P. Bloomfield, Jr., "Globalization of Export Controls and Sanctions," *Defense Institute of Security Assistance Management Journal*, Winter 2002-2002, 52, available from http://disam.osd.mil/Journals/Web_Journal24_2.pdf.

³³ *National Security Strategy* (Washington, D.C.: Government Printing Office, 2002), available from <http://www.whitehouse.gov/nsc/nss.html>.

Chapter 5

The Way Ahead Recommendations

Up until September 2001, the U.S., particularly the Departments of Defense and State, was heavily considering reducing constraints and expediting the export licensing process for some of our overseas allies. In 1999, former Deputy Secretary of Defense John J. Hamre began acknowledging the need for change by stating, “We still have a government licensing process that was designed around the business practices of the 1970s. That’s really quite typical of much government regulations. After all, the process of designing the regulations usually is very interactive with the private sector at the time they are designing the rules. But the private sector has changed.” Hamre goes on to describe how industry has undertaken its own form of global engagement by setting up corporate offices in many countries. Manufacturing has become transcontinental. Obsolete arms export control licensing was one of the hindrances that prevented true coalition interoperability in Operation Allied Force. Future, properly controlled, technology transfer fosters our most pressing national security requirements.

The Defense Institute of Security Assistance Management, the Defense Security Cooperation Agency, the Department of State Bureau of Political Military Affairs and the military Service security assistance implementing agencies should all emphasize that both industry and world-wide U.S. security assistance organizations have the responsibility to ensure foreign representatives have the proper knowledge and ability to enter into what are becoming

more complex foreign military and direct commercial sales. Especially, those countries such as Turkey whose procurement apparatus is just now maturing to the extent that enables “graduate” level acquisition and modernization without a great deal of “friendly counseling” from the U.S. Government. Security assistance organizations should not hinder a developing country’s ability to *break the chains of dependence*. Although not yet attaining the independence in acquisition and procurement maturity achieved by Great Britain, Germany, France, Israel and a few other developed Tier I countries, Turkey stands at the top of the next tier of nations aspiring to attain greater autonomy. This desire runs deep in the Turkish Government and is prevalent in Turkey’s quest for entry into the European Union where economic, military, political and human rights reforms and self-sufficiency are prerequisites to membership.

Turkey will have to prove its ability to consistently perform as a Tier I nation. It has the opportunity to do so in the economic and military arenas by exhibiting a thorough understanding of an integral part of negotiating national-level security assistance programs – namely offsets. Offsets are better understood as the industrial compensation to a foreign purchaser for purchasing military capabilities, usually hardware. Offsets are becoming an increasingly prevalent part of arms transfer negotiations and will become institutionalized as economically challenged nations attempt to compensate for a lack of investment capital. The common definition of offsets comes from the Security Assistance Management Manual (SAMM) stating,

“...offsets are industrial compensation practices required as a condition of purchase in either government-to-government or commercial sales (direct commercial sales) of defense articles and/or defense services as specified in the ITAR. In defense trade, offsets are mandatory co-production, licensed production, subcontractor production, technology transfer, counter trade, and foreign investment. Offsets may be direct, indirect, or a combination of both. Direct offsets refer to compensation such as co-production or subcontracting, ‘directly’ related to the system being exported. Indirect offsets apply to compensation unrelated to the export item, such as foreign investment.”³⁴

What the SAMM does not address are the offsets obtained under direct commercial sales where the USG does not have visibility into the direct contractor-foreign purchaser-only negotiations. The current nature of global arms exportation has driven foreign purchasers to insist on innovative offset packages to secure contract signature. What is interesting is the rise in technology transfer as a negotiated offset, and the sophisticated level of competency necessary to negotiate an offset agreement.³⁵ These are very sticky subjects that require extreme DoS and DoD scrutiny. The trend shows that the larger the contract the higher the percentage of offset and the increased emphasis on technology transfer.

Over the last ten to fifteen years, the importance of advanced technology assimilation has become a key discriminator in international competition for advanced weapon systems. Because of flexible financing, domestic work incentives and liberal national import-export laws governing arms transfer, many European Tier I nations are able to entice foreign purchasers in what were once exclusive U.S. markets. The new NATO members of Central Europe were initially viewed as prime targets for U.S. industry arms exportation. But, with the recent selection of European arms over U.S. options by some of those nations, an extremely disturbing trend has started that reduces U.S. influence in markets wrought with fragile economies and little credible cash flow. The international arms market is prime for creating attractive offsets to lure a nation to buy other than the higher priced U.S. system; they do so even if NATO interoperability is partially sacrificed.³⁶

U.S. industry is well aware of this challenge and the steps it needs to take in foreign arms markets to secure “export licenses and other authorizations necessary to support required levels

of technology transfer in major international programs is a determinant of [any firm's] ability to compete in the global market place."³⁷ Firms should be prepared to plan for quick processing; ensuring the proper agencies are aware of program requirements. To facilitate rapid processing, negotiating parties should make every effort to reduce limitations and consolidate technology transfer provisions, when able.

For example, the Turkish Air Force, the Turkish Undersecretariat for Defense Industries, Boeing Corporation and the U.S. Government dedicated almost an entire year disentangling classified and unclassified provisions for technology access and transfer, and deciphering misunderstandings generated during the new Turkish Airborne Early Warning and Control aircraft program contract negotiations.³⁸ Much time was wasted, as well as contractor-purchaser confidence fractured as mistrust spiraled almost to program termination. There is much to be said about allowing USG representation to observe direct commercial sales negotiations to provide quicker government imposed provision resolution of U.S. origin arms that undoubtedly accompany multi-million dollar, sophisticated weapon system procurement. The combination DCS-FMS program, commonly known as a hybrid sale, allows for greater USG visibility into total program specifications as there is usually U.S. government furnished equipment that requires USG oversight and formal management required by U.S. law. The disposition of classified technology transfer provisos is the greatest obstacle to smooth, timely negotiations. Assuring the USG of the recipient nations program commitment, its capability to provide necessary protection against uncontrolled technology proliferation and that nations relationship with the U. S. all play significantly during DoS Office of Defense Trade Controls and DSCA Weapons Division reviews for export license/technology transfer approval. A sound technology

transfer plan, clearly justified and understood by all parties, weighs significantly in securing timely USG approvals.

The Republic of Turkey gained public support for its recent contract negotiations with Boeing for AEW&C only when that company presented a very lucrative offset package in the eleventh hour of during direct commercial sale negotiations. Plain and simple, Turkey used the offsets offered to gain popular support that the purchase was important to the collective national defense and would rejuvenate the stagnant aviation industry. Boeing's offset deal will add \$500 million worth of commercial aircraft structural fabrication and parts business to Turkey's Tusas Aerospace Industries. The attractive offsets offered by Boeing will create jobs and capital, especially important in the weakened Turkish economy. Securing such a lucrative offset package sends clear signals of Turkey's economic and military prowess. Turkey views the purchase of the AEW&C capability from the U.S. as a way to acquire state-of-the-art command and control technology while energizing their languishing aerospace industry.

The USG has the opportunity to implement the intent of the new National Security Strategy by:

“...taking advantage of the technological opportunities and economies of scale in our defense spending to transform NATO military forces so that they dominate potential aggressors and diminish our vulnerabilities; and maintaining the ability to work and fight together as allies even as we take the necessary steps to transform and modernize our forces.”³⁹

Jointly working together will ensure the appropriate amount of technology is transferred as the AEW&C program matures.

As a warning, the U.S. should not feel too confident regarding Turkey's historical preference for U.S. origin arms. There are many other players, Israel, Germany and Spain,

waiting in the wings for the opportunity to pick up missed U.S. initiatives. All too many times restrictive U.S. technology transfer policies have driven Turkey to consider other suppliers. As recently as 7 July 2001, the Turkish Ministry of National Defense sent a letter to the USG requesting relief from what they considered a restrictive F-16 electronic warfare technology transfer policy (Attachment 2). The USG considers electronic warfare security as a national priority, although NATO interoperability has been sacrificed at our allies' expense. The U.S. Defense Trade Security Initiative presented by U.S. Secretary of State Madeline Albright at the May 24, 2000 NATO Foreign Ministers' Conference has not been applied in earnest towards Turkey.⁴⁰ Oftentimes non-U.S. suppliers market lucrative arms "deals" unimpeded by export laws and regulations. This creates a competitive environment where offsets speak louder than dwindling U.S. FMS credits.

The way ahead is still riddled with obstacles. Resources available in a once dominant U.S. security assistance environment are being diverted to fund other, more critical U.S. security initiatives. Yet, Turkey's willingness to move forward by obligating its own scarce national resources for greater security capability in a volatile neighborhood, speaks volumes of its commitment to hold its own ground and share of the NATO security burden. Stepping away from security dependence indicates a strong resolve to better Turkey's position and prestige as an emerging world leader.

Notes

³⁴ DoD Manual 5105.38, *The Security Assistance Management Manual*, 5 February 2002, Glossary of Terms.

³⁵ Offset Agreements are agreements, arrangements, or understandings between a US supplier and a non-US Purchaser under which the supplier agrees to purchase or acquire, or to promote the purchase or acquisition by other US persons of, goods or services produced, manufactured, grown, or extracted, in whole or in part, outside the US in consideration for purchase of defense articles or services from the supplier. A US person means an individual who is a national or permanent resident alien of the US and any corporation, business association,

partnership, trust, or other judicial entity incorporated, or permanently residing in the US (Public Law, Section 732, 103-236).

³⁶ John Wildfong, Vice President, Lockheed Martin Fixed Wing Aviation, interviewed by author, 24 October 2002.

³⁷ Charles G. Jameson, *The Technology Transfer Pyramid and How to Climb It* (The Export Bulletin, Northrop Grumman International, Export Management Department, July 2000).

³⁸ Based on author's personal observation and involvement in the Turkish AEW&C FMS content negotiations as the Chief, Air Force Directorate, U.S. Office of Defense Cooperation Turkey.

³⁹ *National Security Strategy*.

⁴⁰ Madeline Albright, "U.S. Defense Trade Security Initiative," speech, NATO Foreign Ministers' Conference, Florence, Italy, 24 May 2000, distributed to U.S. country-team and U.S. defense contractors via U.S. Diplomatic Mission to Turkey memorandum, 30 May 2000.

⁴¹ U.S. Department of Defense, Office of the Under Secretary of Defense for Acquisition and Technology, *Final Report of the Defense Science Board Task Force on Globalization and Security*, December 1999, available from <http://www.acq.osd.mil/dsb/globalization.pdf>.

⁴² *Ibid.*

Chapter6

Conclusion

U.S. arms controls will prevent U.S. industry from exporting advanced military technology to its allies if national security objectives overshadow the benefit of a particular transfer. The U.S. has demonstrated its willingness to outweigh the risks of abnormal arms transfer to France, Germany, the United Kingdom and other select “favored nations.” Turkey should not be excluded from this consideration as its control regimes are just as stringent and compare in scope and effectiveness to those of the U.S. Turkey’s common safeguards and policies are essential to its own military transformation and modernization survival. Transformation, a politically motivated catchword in the U.S., plays directly into the broader national globalization that will impact U.S.-Turkish foreign policy.

In his tasking memorandum to the Defense Science Board (DSB) in 1999, Under Secretary of Defense (Acquisition and Technology) Jacques S. Gansler stated, “the overarching risk of globalization [of U.S. defense industry] is that critical military or dual-use technology will be transferred or “leaked” to U.S. adversaries.”⁴¹ The DSB concluded that the benefits of industrial globalization far outweigh the risks. In evaluating the risks and benefits, the DSB examined areas of commercialization, transnational defense industry mergers and globalization of product markets. Of these three areas, transnational defense industry mergers and acquisitions affect security assistance the most. The DSB report cited numerous benefits to transnational defense

industry linkages. Specifically, “the DSB concluded that these linkages will help spread the burden of new technology development and production between the U.S. and its [Allies].”⁴²

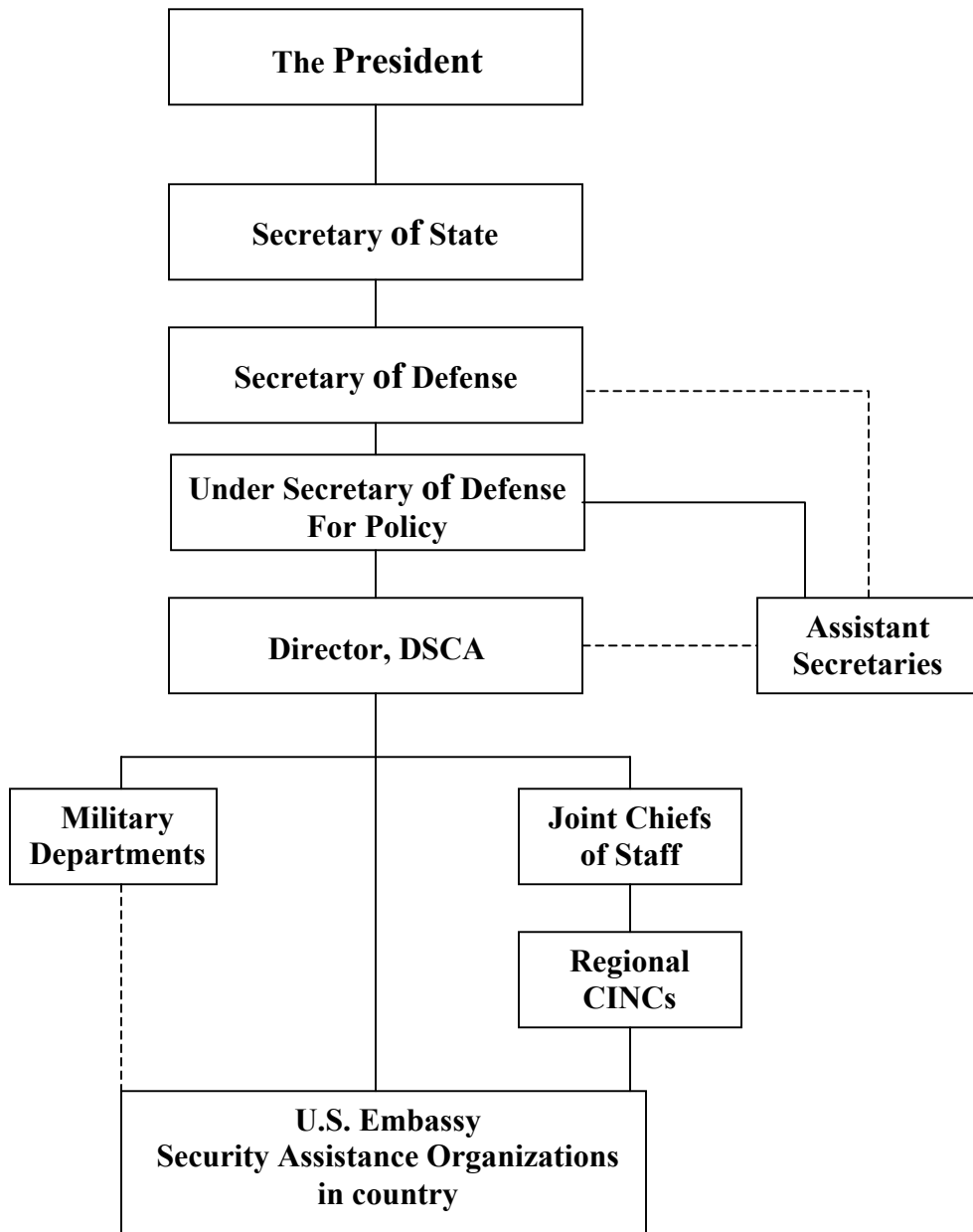
Yet, we need not overlook that the greatest risk to transnational defense industry arrangements will always be the transfer of critical military technology to unauthorized third parties. We are fortunate that U.S. industry has as much to lose as the U.S. Government. U.S. firms have a strong propensity to only transfer technology that will not hurt their competitiveness in their respective market place. As a matter of practice, U.S. firms program and expect transferring advanced technologies with a dramatic life expectancy of only two to three years. U.S. firms will hang on to technological advantages as long as possible and then only transfer as part of a foreign program only at an exact, strategic decision point. Good examples are access to space, surveillance, sensor and signal processing, high fidelity simulation and telecommunications; all requiring technology upgrades after relative short initial operating periods.

To successfully ensure advanced technology transfer is programmed and executed with the knowledge and commitment of all parties involved, there must be an explicit understanding of the complex relationships between the different levels of program hardware and software elements. But, this is not enough. All parties of a security assistance program (U.S. Government office of primary responsibility (if required), the prime and sub-contractors and the foreign purchasing nation) must have a firm understanding of the applicable U.S. Government releasability policies and guidelines. Base lining a common starting point and frame of reference prior to and throughout contract negotiations, alleviates much frustration and misunderstanding between all parties.

In order to reverse security assistance dependence, the preceding analysis demonstrates that potential users must possess the ability to protect U.S. significant military hardware and software technology transfer. The U.S. contractor-foreign nation team must re-enforce safeguards showing compliance that abates USG concerns that transferring arms and technologies may fall into unwanted third-party hands. Doing so will reduce the necessity for the U.S. wielding national power in the international arena.

Attachment 1

Security Assistance Relationships



Legend: — Direction
----- Coordination

Attachment 2

REPUBLIC OF TURKEY MINISTRY OF ANTIONAL DEFENSE ANKARA

6048-936-01/Tech.Coor.(A.B.D.)

7 JULY 2001

USG EW Integration Policy

ODC

1. Although the concerns about the recent USG EW integration policy have been expressed several times in different platforms by Turkish officials, during PO-1&2 [PEACE ONYX 1&2 F-16 FMS case identifier] Financial Review (19-22 June 2001) upon a question raised by Turkish side, the F-16 SPO [System Program Office] has requested that these concerns are to be taken into account.

a. Electronic Warfare Integration Policy issued by USAF is causing delay in the modernization program of our F-16 Block-50 A/C and will adversely effect other projects like Attack helicopter, TAEW&C [Turkish Airborne Early Warning and Control], stand-off Jammer..etc.

b. The restrictions in the policy seems like not only from the system interoperability point of view, but also commercial and the industrial competition consideration of the U.S. companies.

c. The policy is serving neither for our expectations nor for U.S. Government benefits. Turkey may consider to selecting non-U.S. platforms for the future projects because of the restrictions set forth in the policy.

d. ... has expected this policy to include only the interoperability requirements that can be used as guidelines to be met during the design and development of the EW systems in order for TUAF [Turkish Air Force] to conduct a flawless joint air operation without worrying about fratricide.

2. The severe constraints expressed in the policy causing serious concerns on our part and it is expected that the policy will be revised to include the minimum constraints, which will best serve to both parties' mutual benefits.

FOR THE MINISTER

H.Ali HEKIMOGLU

Col., TUAF

Chief of MND-TU F-16 SPO

Glossary of Selected Terms

(source: Department of Defense Manual 5105.38, *The Security Assistance Management Manual*, 5 Feb 2002)

Country Team – Senior members of U.S. Government agencies assigned to a U.S. diplomatic mission overseas, and subject to the direction and supervision of the Chief, U.S. Mission (Ambassador). Team members coordinate U.S. Government political, economic, and military activities and policies in the host country.

Defense Articles – Weapons, weapons system, munitions, aircraft, vessel, boat, or other implement of war; any property, installation, commodity, material, equipment, supply, or goods used for the purposes of furnishing military assistance or making military sales; any machinery, facility, tool, material, supply, or other item necessary for the manufacture, production, processing, repair, servicing, storage, construction, transportation, operation, or use of any other defense article or any component or part of any article listed above, but shall not include merchant vessels, major combatant vessels, or as defined by the Atomic Energy Act of 1954, as amended, source material, by-product material, special nuclear material, production facilities, utilization facilities, or atomic weapons or articles involving Restricted Data. {Section 644(d), FAA and Section 47(3), AECA}

Direct Commercial Sales or DCS– Sale made by U.S. industry to a foreign buyer, which is not administered by the DoD through FMS procedures.

Foreign Military Sales or FMS – That portion of U.S. security assistance authorized by the AECA, as amended, and conducted on the basis of formal contracts or agreements between the U.S. Government and an authorized recipient government or international organization. FMS includes government-to-government sale of defense articles or defense services, from DoD stocks or through purchase under DoD-managed contracts, regardless of the source of financing.

Memorandum of Understanding or MOU – A written understanding between governments or international agencies setting forth the terms under which they will cooperate in the performance of certain work such as research, development, production, or utilization. The MOU usually sets down, in broad terms, the objectives of the program, the work to be performed by each participant and its financing, the rights to technical data and patents to be acquired, and other elements concerned with the performance of the program.

Military Export Sales – Sales of defense articles and services made from U.S. sources to Foreign governments, foreign private firms, and international organizations, whether made by DoD or by U.S. industry. Such as generally fall into two major categories: foreign military sales and direct commercial sales.

Offsets - Offsets are industrial compensation practices required as a condition of purchase in either government-to-government or commercial sales (direct commercial sales) of defense articles and/or defense services as specified in the ITAR. In defense trade, offsets are mandatory co-production, licensed production, subcontractor production, technology transfer, counter trade, and foreign investment. Offsets may be direct, indirect, or a combination of both. Direct offsets refer to compensation such as co-production or subcontracting, ‘directly’ related to the system

being exported. Indirect offsets apply to compensation unrelated to the export item, such as foreign investment.

Security Assistance – Group of programs authorized by the FAA of 1961, as amended, and the AECA as amended, or other related statutes by which the U.S. provides defense articles, military training, and other defense related services, by grant, credit, or cash sales, in furtherance of national policies and objectives.

Significant Military Equipment or SME – Those defense articles and services on the USML on the ITAR, which are preceded by an asterisk. SME are articles that require special export controls because of their capacity for substantial utility in the conduct of military operations.

Software – Programs, databases, and associated documentation available on human and/or machine-readable media such as paper, magnetic tapes, disks, or embedded firmware that operate computer.

Source Code – A subset of computer software documentation, is a set of symbolic computer instructions that is written in a high-level/human-readable language that cannot be directly executed by the computer without first being translated into object code.

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